

Dissolved Oxygen On-Lake Procedure Summary

LaMotte Titration Kit

1. Collect water sample from the first depth assigned by CLMN coordinator using van dorn water sampler (Refer to “Schedule for Chemistry, Temperature and Dissolved Oxygen Monitoring” form).
2. Select the D.O. bottle with the depth written on it that corresponds to the sample depth you are collecting. Remove cap
3. Insert sampler hose to bottom of bottle. Overfill at least three times
4. Remove hose while water is still flowing to overflow the bottle
5. Cap the bottle
6. Put on safety gloves and goggles
7. Remove cap; add 8 drops of Manganous Sulfate solution from the squeeze bottle
8. Add 8 drops of Alkali Potassium Iodide Azide solution from the squeeze bottle
9. Cap and mix by inverting 20 times
10. Allow precipitate (the solid substance forming in the bottle) to settle $\frac{1}{2}$ way down the bottle
11. Invert 10-20 times to re-mix the precipitate. Let the precipitate settle $\frac{1}{2}$ way down the bottle again
12. Add 8 drops of Sulfuric Acid
13. Cap the bottle and invert to mix. Continue inverting the bottle for several minutes until all of the precipitate has dissolved. Place bottles in holder for on shore procedure (see on-shore procedures on page 6.8 through 6.13 of your manual)
14. Repeat steps 1-13 for each successive pre-selected depth (refer to “Schedule for Phosphorus, Chlorophyll, Temperature and Dissolved Oxygen Monitoring” form).
15. Complete remaining analysis for all samples on shore (see on-shore procedures on pages 6.8 through 6.13 of your manual)